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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/868,141

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Shuji Takana

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EXAMINER

DOUYON, LORNA M

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

01/26/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 09/868,141	<b>Applicant(s)</b> TAKANA ET AL.	
	<b>Examiner</b> Lorna M. Douyon	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 21, 2008 has been entered.

2. Claims 1-2, 4-6, 8 and 16 pending.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 2, 4-6, 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al. (US Patent No. 4,900,466), hereinafter "Atkinson".

Atkinson teaches powders prepared by spray drying and suitable for use as detergent powders or components thereof and contain sodium carbonate and/or sodium carbonate/sodium sulphate double salt Burkeite modified with a low level of an organic polycarboxylate (see abstract). Atkinson also teaches a process for the production of a powder suitable for use as a granular detergent composition or a component thereof, which comprises the steps of (i) preparing an aqueous slurry comprising sodium carbonate, and optionally also comprising sodium sulphate, an effective amount of a

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crystal growth modifier which is an organic material having at least three carboxyl groups in the molecule; and optionally one or more anionic and/or nonionic detergent active compounds, (ii) drying to form a powder; (iii) optionally incorporating into the dried powder one or more detergent components in liquid form and/or mixing the dried powder with one or more solid detergent components (underlinings supplied; see col. 2, line 67 to col. 3, line 27). The spray-dried powder of step (ii) may be a predominantly inorganic carrier intended specially as a vehicle for the nonionic surfactant, and may perhaps form only a minor part of the final product, and in step (iii) it will then be mixed with the main product, which might itself have been spray-dried in a separate operation (see col. 6, lines 62-68). The adjunct will be prepared by spraying liquid or liquefied nonionic surfactant onto a spray-dried carrier material according to the invention, and the adjunct is then postdosed to a base powder containing anionic surfactant, possibly nonionic surfactant and builders prepared in a separate spray-drying operation and that the adjunct, may, for example, contain from 5 to 40% by weight of nonionic surfactant and from 60 to 95% by weight of crystal-growth-modified inorganic salts and that the adjunct may, for example, constitute from 5 to 20% by weight of the final powder (underlinings supplied, see col. 9, lines 51-62). In Example 11, Atkinson teaches a spray-dried crystal-growth-modified Burkeite and comprising 65.5 wt% sodium sulphate (MW=142), 24.5 wt% sodium carbonate (MW=106), 2.0 wt% sodium polyacrylate (molecular weight 25,000), 4.5 wt% sodium silicate (MW=122) and 1.5 wt% total surfactant (see col. 13, line 58 to col. 14, line 20), wherein the molar ratio of sodium sulphate ( $65.5/142=0.46$ ) + sodium polyacrylate ( $2.0/25,000=0.00008$ ) + sodium silicate

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( $4.5/122=0.037$ ) to sodium carbonate ( $24.5/106=0.23$ ) is about 7:3. This spray dried carrier is equivalent to the detergent additive particles (a) of the present claims. This material was suitable for addition to a phosphate-built or aluminosilicate built detergent powder in Example 24 and 25 (see col. 14, lines 16-20). In each of Examples 24 and 25, 10.0 wt% of the carrier of Example 11 was incorporated into a spray-dried base powder comprising at least 10% by weight total surfactants wherein the final powder has a bulk density of 500g/l and 540 g/l, respectively (see col. 19, line 8 to col. 20, line 35), the spray-dried base powder being equivalent to the detergent particles (b) of the present claims. The spray dried carrier material, that is the crystal-growth-modified Burkeite, may form a major or minor part of the product (see col. 8, lines 10-13).

Atkinson, however, fails to disclose the dissolution rate, microporous capacity, capability of releasing a bubble and a localized structure of the spray dried carrier material as those recited, the bulk density and particle size of the carrier material, the bulk density, particle size of the spray-dried base powder, and a carrier material containing less than 1% by weight of a surfactant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the spray dried carrier material of Atkinson, as disclosed in col. 3, lines 3-18, to have a bulk density, particle size, dissolution rate, microporous capacity, capability of releasing a bubble and a localized structure within those recited; and the base powders, as in Examples 24 and 25, to have a bulk density and particle size as those recited because similar compositions, similar ingredients and the same spray-drying process have been utilized. In addition, the final product, which

was a blend of the spray-dried carrier material and spray-dried base powder, has a bulk density of about 500 g/l, hence each of the spray-dried carrier material and spray-dried powder, prior to blending should also have the same bulk density, particle size and properties as those recited.

With respect to the amount of surfactant in the carrier material which is less than 1 wt%, it would have been obvious to one of ordinary skill in the art at the time the invention was made to not include a surfactant into the carrier because this is only optional as disclosed in col. 3, lines 11-12. In addition, the spray dried carrier need not be incorporated with detergent components in liquid form, but only mixed with one or more solid detergent components as disclosed in col. 3, lines 20-23. In the alternative, regarding the 1.5 wt% surfactant in the spray dried carrier in Example 1, a *prima facie* case of obviousness exists where the claimed ranges (i.e. "less than 1 wt%") and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium Metals Corp. of America v. Banner*, 778F.2d 775,227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.051.

Additionally, with respect to the detergent additive particles (a) being capable of releasing a bubble of the recited size, it has been held that the recitation that an element is "adapted to" perform or is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. The recitation of a new intended use for an old product does not make a claim to that old product patentable, see *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997).

***Response to Applicants' Arguments***

5. Applicants' arguments filed November 21, 2008 have been fully considered but they are not persuasive.

With respect to the rejection based upon Atkinson, Applicants argue that Atkinson fails to disclose or suggest the claimed limitation that the detergent additive particles (a) contain no surfactant or less than 1% by weight of surfactant. Applicants also argue that at column 9, lines 51-62, Atkinson describes that "An adjunct will be prepared by spraying liquid or liquefied nonionic surfactant onto a spray-dried carrier material ..." and the Tables found in columns 8-9 of Atkinson demonstrates use of surfactants in an amount of 5-40 weight %, and further, Example 11 of Atkinson employs 1.5 wt% surfactants.

The Examiner respectfully disagrees with the above argument because, as stated above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to not include a surfactant into the carrier because this is only optional as disclosed in col. 3, lines 11-12. In addition, the spray dried carrier need not be incorporated with detergent components in liquid form, but only mixed with one or more solid detergent components as disclosed in col. 3, lines 20-23. Also, a reference is not limited to the working examples, see *In re Fracalossi*, 215 USPQ 569 (CCPA 1982). All disclosures of the prior art, including non-preferred embodiment, must be considered. See *In re Lamberti and Konort*, 192 USPQ 278 (CCPA 1967). Also, non-preferred embodiments can be indicative of obviousness, see *Merck & Co. v. Biocraft*

Laboratories Inc. 10 USPQ 2d 1843 (Fed. Cir. 1989); *In re Lamberti*, 192 USPQ 278(CCPA 1976); *In re Kohler*, 177 USPQ 399.

Applicants also argue that Atkinson is silent about the claimed limitation that the detergent additive particles (a) comprise a particle capable of releasing a bubble of a size 1/10 or more of the particle size from an inner portion of the particle.

The Examiner respectfully disagrees with the above argument because, as stated above, it has been held that the recitation that an element is "adapted to" perform or is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. The recitation of a new intended use for an old product does not make a claim to that old product patentable, see *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Lorna M Douyon/  
Primary Examiner, Art Unit 1796